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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/767,051   | 01/29/2004  | Young-Chin Chen      | U 015013-0          | 4814             |
| 140  | 7590        | 07/10/2007           | EXAMINER            |                  |
| LADAS & PARRY<br>26 WEST 61ST STREET<br>NEW YORK, NY 10023 |             |                      | KUMAR, PREETI       |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 1751                |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/767,051

Applicant(s)

CHEN, YOUNG-CHIN

Examiner

Preeti Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 6-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Final Rejection***

1. Claims 1-3 and 6-13 are pending with claims 6-13 being newly added in the amendment filed 3/20/2007.
2. Fabric Specimen filed 3/20/2007 is acknowledged
3. Claims 1 and 6 are independent.

### ***Response to Amendment***

4. The rejection of claim 1 under 35 U.S.C. 112, second paragraph is maintained.
5. The rejection of claims 1-3 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kielbania (US 4,507,342) is maintained. Please see the new grounds of rejection below.

### ***Response to Arguments***

6. Applicant's arguments filed 3/20/2007 have been fully considered but they are not persuasive. Applicants urge that the prior art does not teach a translucent pattern. Contrary to Applicant's arguments, Kielbania teaches a conventional printing paste is prepared of three major ingredients: pigment, thickener and binder. Before these ingredients are mixed to form a print paste, a "cut clear" is formed with a thickener. The cut clear is a translucent gel having a consistency over 100,000 cps. The cut clear functions as a viscosity builder in the paste. See col.32,ln.53-60.

Also Applicants urge that Kielbania teaches that the printing paste and etching agent are mixed and not applied in separate steps. Kielbania teaches that the quaternary ammonium units provide excellent dye pickup, which printing/dyeing step is

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a separate step prior to a subsequent chemical etching step with sodium bicarbonate catalyst. See col.8,ln.35-40 and col.14,ln.64, and example.18. Accordingly the rejection over Kielbania has been maintained.

***New Grounds of Rejection***

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants recite the language of synthetic fiber fabric. The term "fiber fabric " in claim 1 is a relative term which renders the claim indefinite. The term " synthetic fiber fabric" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Specifically, Applicants specification provides no guidance as to what is included or excluded by the terminology of "fiber fabric".

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1-3 and 6-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kielbania (US 4,507,342).

Kielbania teaches a conventional printing paste is prepared of three major ingredients: pigment, thickener and binder. Before these ingredients are mixed to form a print paste, a "cut clear" is formed with a thickener. The cut clear is a translucent gel having a consistency over 100,000 cps. The cut clear functions as a viscosity builder in the paste. Next a color concentrate is prepared by blending a presscake dispersion (a pigment dispersion in water), a cut clear, and water for about 15 minutes until a creamy flowing paste of about 1950 cps viscosity results. See col.32,ln.53-60.

In example 18a Kielbania teaches a control print paste is prepared by mixing 60 parts of a cut clear containing 6% of the nonionic thickener, 4.3 parts of 35% aqueous pigment dispersion, 30 parts water, 5.8 parts of a 60% solids acrylic binder (97 EA/3 a low energy heat curable quaternary ammonium salt vinyl monomer and 0.175 part sodium bicarbonate as catalyst. See examples 18 a and b.

Regarding the claimed temperature of claims 11-13, Kielbania illustrate pigment printed nonwoven polypropylene by applying the pigment paste to Kimberly-Clark

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spunbonded pinsonic embossed nonwoven polypropylene fabric, by the screen printing process and then cured by heating in a conventional oven at 228 F (108 C) for 3 minutes which teaching encompasses the claimed limitation to bonding and the further step of drying at 50-210 C. See examples 18 a and b.

Regarding the claimed process of printing prior to etching, Kelbania teaches crosslinking the polymer fabric with a quaternary ammonium salt to provide a particularly dyeable fabric by dyes such as acid dyes, metallized dyes and direct dyes. See col.1,ln.33, col.6,ln.30-45. Kelbania teaches that the quaternary ammonium units provide excellent dye pickup, which printing/dyeing step is a separate step prior to a subsequent chemical etching step with sodium bicarbonate catalyst. See col.8,ln.35-40 and col.14,ln.64, and example.18:

Accordingly, the teachings of Kelbania appear to anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of Kelbania are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art, to arrive at a process for producing a fabric comprising a process wherein the printing with a quaternary ammonium salt printing developer is done prior to an etching step as recited by the instant claim 1 because Kelbania provides motivation to one of ordinary skill in the art to produce a patterned fabric by a 2 step process and further suggests crosslinking the polymer fabric with a quaternary ammonium salt to produce a particularly dyeable fabric, which

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printing/dyeing step is a separate step done prior to a subsequent chemical etching step with sodium bicarbonate catalyst.

***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 571-272-1320. The examiner can normally be reached on M-F 9:00am - 5:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Mc Ginty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Preeti Kumar PK.  
Examiner  
Art Unit 1751

PK

  
DOUGLAS MCGINTY  
SUPERVISORY PATENT EXAMINER

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